METHOD AND MICROELECTRONIC DEVICE FOR MULTI-SITE MOLECULE DETECTION

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ABSTRACT

A method and apparatus are provided for identifying molecular structures within a sample substance using an integrated circuit array sensor having a plurality of test sites upon which the sample substance is applied. Each test site includes a probe formed therein to bond with an associated target molecular structure. An electrical signal produced on the test site upon forming or breaking of molecular probe-target duplexes is detected to determine which probes have bonded to an associated target molecular structure.